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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,106	06/12/2002	Hai-Ming Zhang	IACP0007USA	9172

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P.O. BOX 506

MERRIFIELD, VA 22116

EXAMINER

DANG, HUNG Q

ART UNIT

PAPER NUMBER

2635

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A.D.

Office Action Summary**Application No.**

10/064,106

Applicant(s)

ZHANG ET AL.

Examiner

Hung Q Dang

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2002.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-3,5 and 7-11 is/are rejected.
 7) ☒ Claim(s) 4,6 and 12-20 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 12 June 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first symbol in claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Guo U.S. Patent 6,686,852.

Regarding claim 1, Guo teaches a method for arranging Mandarin Phonetic Symbols on a keypad, Mandarin Phonetic Symbols consisting of 37 symbols, the method comprising: arranging the 37 symbols onto 11 or 12 keys of the keypad (Figure 1).

Regarding claim 2, the 37 symbols disclosed by Guo are indeed arranged onto 12 keys of the keypad.

Regarding claim 3, Guo also teaches the symbols as indicated in claim 3 being arranged onto different keys of the keypad (Figure 1; the indicated keys are arranged on to keys # 2, 5 and 8).

Regarding claim 7, the keypad disclosed by Guo is also positioned on an electronic device (Figure 19).

Regarding claims 8 and 9, the electronic device disclosed by Guo is also a personal data assistant (PDA) or a cellular phone (column 3, lines 29-34).

Regarding claim 10, the electronic device disclosed by Guo also comprises a display panel for displaying information (Figure 19, unit 38).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guo U.S. Patent 6,686,852 in view of Curtin, IV et al. U.S. Patent 5,924,803.

Regarding claim 11, as mentioned above, the electronic device disclosed by Guo also comprises a display panel for displaying information. However, Guo does not specifically disclose said display is a liquid crystal display (LCD).

However, one skilled in the art would recognize that liquid crystal display has been commonly used in electronic devices for displaying information, as evidenced by Curtin IV et al. (column 2, lines 2-11). Therefore, by conventionality, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a LCD to the electronic device disclosed by Guo, as evidenced by Curtin IV et al.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guo U.S. Patent 6,686,852 in view of Zen et al. U.S. Patent 6,007,339.

Regarding claim 5, Guo teaches a method for arranging Mandarin Phonetic Symbols on a keypad as claimed in claim 1. However, Guo does not teach the limitation claimed in claim 5.

Zen et al., in the same field of endeavor, teaches the arrangement of the symbols claimed in claim 5 (Figure 1, key 104).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made provide the claimed symbols arrangement suggested by Zen et al. to the method disclosed by Guo in order to achieve optimal symbols arrangement.

Allowable Subject Matter

7. **Claims 4, 6 and 12-20** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the prior arts of record fail to teach or disclose a method for arranging Mandarin Phonetic Symbols on a keypad, wherein the symbols claimed in claim 4 are arranged onto "*" key, 0 key and # key.

Regarding claim 6, the prior arts of record fail to teach or disclose a method for arranging Mandarin Phonetic Symbols on a keypad, wherein the claimed symbols (see symbols in claim 6) are arranged according to the way claimed in claim 6.

Regarding claim 12, the prior arts of record fail to teach or disclose a method for arranging Mandarin Phonetic Symbols on a keypad as claimed in claim 1, wherein when

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entering a key on the keypad to input an initial and another key to input a final, possible combinations of initials and finals corresponding to the keys are displayed in a manner that combinations having the same initial are displayed on the same line, and combinations having different initials are displayed on different lines.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HD

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

